

Please add the following claims:

- B1
- 09/25/03 05:16:04
17. The fusion receptor of claim 2, wherein the connector is a CD8 hinge.
18. The fusion receptor of claim 3, wherein the connector is a CD8 hinge.
19. The fusion receptor of claim 4, wherein the connector is a CD8 hinge.
20. The fusion receptor of claim 5, wherein the connector is a CD8 hinge.
21. A method for treating a patient suffering from cancer, wherein the cells of the cancer or neovasculature associated with the cancer express prostate-specific membrane antigen, comprising the steps of:
- (a) preparing an expression vector comprising an expressible polynucleotide molecule encoding a fusion protein in accordance with claim 2;
 - (b) transducing the expression vector into peripheral blood lymphocytes obtained from the patient to obtain transduced lymphocytes expressing the fusion protein; and
 - (c) reintroducing the transduced lymphocytes into the patient, whereby said transduced lymphocytes respond to antigen on the surface of the cells of the cancer to generate a cytolytic immune response to the cells of the cancer.
22. A method for treating a patient suffering from cancer, wherein the cells of the cancer or neovasculature associated with the cancer express prostate-specific membrane antigen, comprising the steps of:
- (a) preparing an expression vector comprising an expressible polynucleotide molecule encoding a fusion protein in accordance with claim 3;

- (b) transducing the expression vector into peripheral blood lymphocytes obtained from the patient to obtain transduced lymphocytes expressing the fusion protein; and
- (c) reintroducing the transduced lymphocytes into the patient, whereby said transduced lymphocytes respond to antigen on the surface of the cells of the cancer to generate a cytolytic immune response to the cells of the cancer.


22. A method for treating a patient suffering from cancer, wherein the cells of the cancer or neovasculature associated with the cancer express prostate-specific membrane antigen, comprising the steps of:

- (a) preparing an expression vector comprising an expressible polynucleotide molecule encoding a fusion protein in accordance with claim 4;
- (b) transducing the expression vector into peripheral blood lymphocytes obtained from the patient to obtain transduced lymphocytes expressing the fusion protein; and
- (c) reintroducing the transduced lymphocytes into the patient, whereby said transduced lymphocytes respond to antigen on the surface of the cells of the cancer to generate a cytolytic immune response to the cells of the cancer.

24. A method for treating a patient suffering from cancer, wherein the cells of the cancer or neovasculature associated with the cancer express prostate-specific membrane antigen, comprising the steps of:

- (a) preparing an expression vector comprising an expressible polynucleotide molecule encoding a fusion protein in accordance with claim 5;
- (b) transducing the expression vector into peripheral blood lymphocytes obtained from the patient to obtain transduced lymphocytes expressing the fusion protein; and

(c) reintroducing the transduced lymphocytes into the patient, whereby said transduced lymphocytes respond to antigen on the surface of the cells of the cancer to generate a cytolytic immune response to the cells of the cancer.

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25. Peripheral blood lymphocytes transduced with and expressing a fusion receptor in accordance with claim 2.
 26. Peripheral blood lymphocytes transduced with and expressing a fusion receptor in accordance with claim 3.
 27. Peripheral blood lymphocytes transduced with and expressing a fusion receptor in accordance with claim 4.
 28. Peripheral blood lymphocytes transduced with and expressing a fusion receptor in accordance with claim 5.
 29. An expression vector comprising a polynucleotide sequence encoding a fusion receptor in accordance with claim 2 and control sequences effective to promote expression of the fusion receptor in mammalian lymphocytes.
 30. An expression vector comprising a polynucleotide sequence encoding a fusion receptor in accordance with claim 3 and control sequences effective to promote expression of the fusion receptor in mammalian lymphocytes.
 31. An expression vector comprising a polynucleotide sequence encoding a fusion receptor in accordance with claim 4 and control sequences effective to promote expression of the fusion receptor in mammalian lymphocytes.
 32. An expression vector comprising a polynucleotide sequence encoding a fusion

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receptor in accordance with claim 5 and control sequences effective to promote expression of the fusion receptor in mammalian lymphocytes.

This amendment has been prepared to eliminate multiple dependencies. No new matter has been added.

Respectfully submitted,

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